Notice of Allowability	Application No.	Applicant(s)	
	10/711,491	ROTHSTEIN, ARTHUR	
	Examiner	Art Unit	
	Brandon S. Hoffman	2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *appeal brief filed September 19, 2007*.

2. ☒ The allowed claim(s) is/are *1-5,7-24,26-38,40-47,49-55 and 57-60*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)·

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

NASSER MOAZZAMI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

11/29/07

DETAILED ACTION

1.   Claims 1-5, 7-24, 26-38, 40-47, 49-55, 57-60 are pending in this office action,

claims 6, 25, 39, and 56 are canceled with the following examiners amendment.

Allowable Subject Matter

2.   Claims 1-5, 7-24, 26-38, 40-47, 49-55, and 57-60 are allowed.

3.   The following is an examiner's statement of reasons for allowance: the prior art of

record fails to teach extracting export information of a function by removing the export

information from an export table. This prevents a hacker from reading and using the

export information in order to exploit export information to be used in an attack.

Any comments considered necessary by applicant must be submitted no later

than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance."

4.   An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview

with G. Mack Riddle (U.S. Reg. No. 55,572) on November 27, 2007.

Claim 1 (Currently Amended).   A method for securing a program comprised of a

plurality of interoperable components, the method comprising:

extracting export information about a function of a first component of the program

that is callable by at least one other component of the program, wherein said extracting

step includes removing the export information from an export table of the first

component;

securing the extracted export information;

in response to an attempt by a second component to invoke the function of the

first component, validating authenticity of the second component;

if the authenticity of the second component is validated, providing access to the

function of the first component using the secured extracted export information; and

otherwise, blocking the attempt by the second component to invoke the function.

Claim 6 (Canceled).

Claim 15 (Currently Amended).   A method for securing a program comprised of a

plurality of modules, at least one of the modules having export information for allowing

other modules to invoke its program code, the method comprising:

generating signatures for at least some of the program's modules;

as the program is loaded, validating said signatures so as to verify authenticity of

respective modules of the program;

for each module having program code that may be invoked by another module,

removing that modules export information, wherein said removing step includes

removing information from an export table;

securely storing any removed export information;

for each module having its export information removed, blocking any attempt

from another module to invoke its program code if the other module cannot be

authenticated; and

if the other module is authenticated, allowing the attempt to proceed using the

securely stored export information.

Claim 25 (Canceled).

Claim 31 (Currently Amended).   A system for securing a program comprised of a

plurality of interoperable components, the system comprising:

a module for extracting export information about a function of a first component

of the program that is callable by at least one other component of the program, wherein

the module for extracting removes an export table entry for the function of the first

component;

a module for securing the extracted export information;

a validation module for validating authenticity of a second component attempting

to obtain export information to invoke the function of the first component, validating

authenticity of the second component; and

a security module for blocking the attempt to invoke the function of the first

component if the second component cannot be authenticated.

Claim 39 (Canceled).

Claim 45 (Currently Amended).   A method for securing an exported function of a

program, the method comprising:

extracting export information about the exported function of the program, wherein

said extracting step includes removing an export table entry for the exported function;

securing the extracted export information;

intercepting an attempt to access the exported function by an importer;

authenticating the importer for determining whether to permit access to the

exported function;

if the importer is authenticated, providing access to the exported function based

on the secured extracted export information; and

otherwise, blocking access to the exported function.

Claim 56 (Canceled).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon S. Hoffman whose telephone number is 571-272-3863. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser G. Moazzami can be reached on 571-272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brandon Hoffman/

BH

NASSER MOAZZAMI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

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